

THE
SRM®
EFFECT



ALWAYS ONE STEP AHEAD



YOUR BENEFITS AT A GLANCE

The innovative patented stud welding process SRM® (Pat. No.: 10 2004 051 389) opens up new applications especially in the field of automated stud welding machines. Numerous conventional mechanical and welding-related joining processes can be replaced by this method allowing welding at a sheet thickness to stud diameter ratio of 1:10 instead of 1:4 as previously.

It also enables energy savings of up to 70 % in comparison to the conventional stud welding method. As there is no further need to use ceramic rings as a welding aid, resources are saved and the costs of disposing of welding waste are considerably reduced.

Further advantages include:

- ▶ Less stud burn-off
- ▶ No disturbing flange, weld bead or weld spatter
- ▶ Stud thread can be used right up to the base material
- ▶ Continuous screw joint
- ▶ No arc blow effect
- ▶ Less distortion of the workpiece
- ▶ Penetration depth reduced by 60 %
- ▶ 60% reduction in welding time
- ▶ 70 % less energy consumption

YouTube



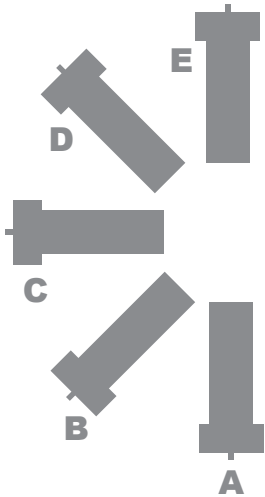


HOW SRM® WORKS

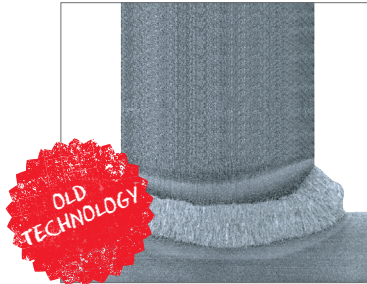
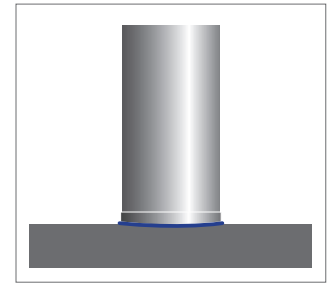
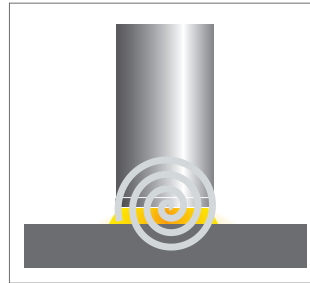
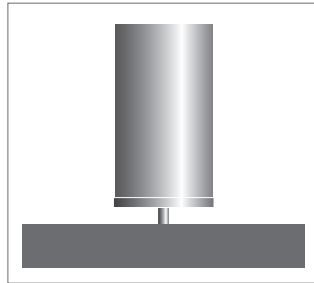
The stud is placed into contact with the workpiece and is raised. The arc is triggered.

The arc is guided in a spiral by the magnetic field and melts both joining parts on their entire surface.

The stud immerses into the very flat penetration zone and is inseparably connected.



Unrestricted use, also in out-of-position welding



**OLD
TECHNOLOGY**

Macrosection of a weld with ceramic ring



**NEW
TECHNOLOGY**

Macrosection of a weld with SRM technology

YouTube



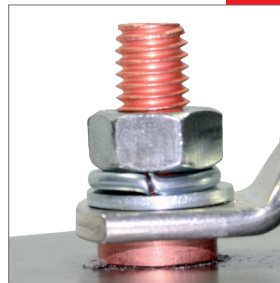
NEW

SOYER ACCU POWER

*Let's weld.
Around the world.*



SRMTECHNOLOGY®
Made by SOYER



STUD WELDING
INVERTER

BMK-8i
ACCU

The BMK-8i ACCU stud welder is ideal for mobile use as it can be operated independently of the mains power supply



Integrated ground contact

No extra ground cable needed!

MOBILE WELDING **WITHOUT** MAINS CONNECTION

The newly developed BMK-8i ACCU weld-ing inverter is the world's first portable high-efficiency battery-operated drawn arc stud welder. It is especially suitable for stud welding up to a diameter of 8 mm (up to

M10 with Soyer HZ-1R) and allows mobile welding in situations where there is no mains connection. If required, the high capacity accumulator can be charged via an integrated intelligent charging module.

ADVANTAGES

- Weighing just 8 kg
- No mains connection required
- Simplest operation with 300 A up to 8 mm Ø
- Unrivalled energy efficiency thanks to SRM Technology®
- Only 1/10 of gas consumption compared to common stud welders



**High-End-
ACCU**

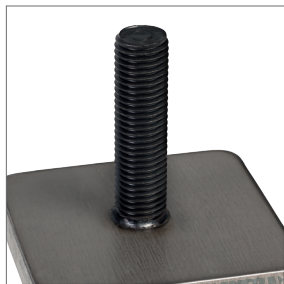
8.0 kg

300 A | up to 8 mm Ø

STUD WELDING INVERTER BMK-8i

The single-phase BMK-8i stud welder is ideal for mobile use: extremely light-weight & portable yet compact & robust

SRMTECHNOLOGY®
Made by SOVER





Integrated ground contact

No extra ground cable needed!

PH-9 SRM+G stud welding gun with integrated ground contact
Patent pending | No.: DE 10 2015 221 384.6



WELDING **WITHOUT** HIGH-POWER CURRENT

The lightweight, handy and very energy-efficient BMK-8i welding inverter is suitable for weld studs up to M8. It is ideal for mobile use and enables problem-free operation, even

under challenging conditions such as out-of-position welding. The BMK-8i stud welder is an inexpensive entry-level model for the SRM® welding technique.

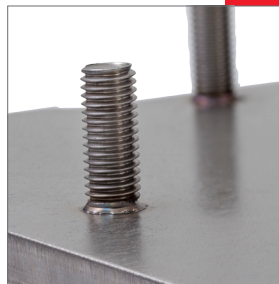


— 300 A | up to 8 mm Ø

STUD WELDING INVERTER BMK-10i

The three-phase BMK-10i stud welding inverter is compact, powerful and extremely energy efficient

SRMTECHNOLOGY®
 Made by SOFER





Integrated ground contact

No extra ground cable needed!

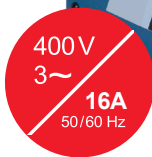
PH-9 SRM+G stud welding gun with integrated ground contact
Patent pending | No.: DE 10 2015 221 384.6



MOBILE WELDING WITH HIGH CAPACITY

The BMK-10i stud welding inverter offers a compact and powerful design for mobile applications. With a welding power of 600 A, this device enables precise, safe and spatter-free welding up to Ø 10 mm (up to

M12 with Soyer HZ-1R). Thanks to easy handling and operability as well as its low weight of 16.5 kg, the robust BMK-10i stud welder allows flexible applications in the fields of production, repair and assembly.



16.5 kg

600 A | up to 10 mm Ø

STUD WELDING INVERTER

BMK-12i

The lightweight BMK-12i is a top-class power package: Small in size but strong in performance

SRMTECHNOLOGY®
Made by SOFER





MOBILE WELDING IN A MINIATURE FORMAT

The miniature stud welder BMK-12i, in a handbag format, weighs just 7.8 kg and, with a welding capacity of 800 amps, is suitable for weld studs of up to Ø 12 mm. It does not require ceramic rings when weld-

ing and produces high strength welded joints without annoying flanges, welding beads or welding splatter. This enables welders to use the stud thread right up to the base material.



7.8 kg 800 A

up to 12 mm Ø



Adjustment cap for lift

SRM magnet coil





UNIVERSAL WELD STUD

HZ-1

This special HZ-1 SOYER weld stud with flat end face and centering tip is ideal for the innovative SRM® magnetic field stud welding process. It is also suited for the standard stud welding processes with capacitor discharge "CD" and drawn arc "DA".



1ST WINNER OF THE 2012 BAVARIAN INNOVATION AWARD

The patented HZ-1 weld stud (Pat. No. 10 2006 016 553) replaces an almost inestimable range of different weld studs available on the market. This type of weld stud offers the following advantages:

WITH THE CORRECT STUD TO SUCCESS

- ▶ Standardization to a single stud type
- ▶ Simplification for construction, technology, purchasing, storage
- ▶ Precise stud positioning by means of centering tip
- ▶ Complete fusion without diameter reduction
- ▶ Stud thread fully usable to the base material
- ▶ Stud copper plating for steel studs as corrosion protection
- ▶ Improvement of product quality and product safety

NEW HZ-1 "BLACK SERIES" WELD STUD GENERATION

of property class 8.8 with full black colour marking (registered as utility patent under file number 20 2015 100 234.3)



You **Tube**



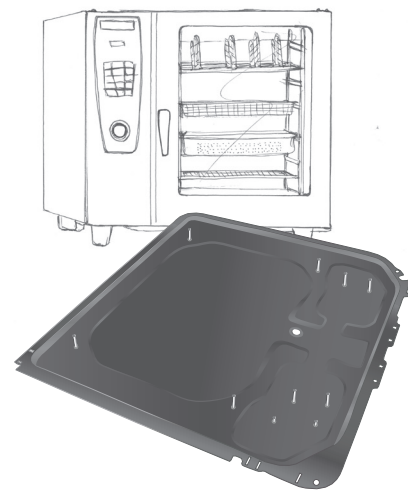
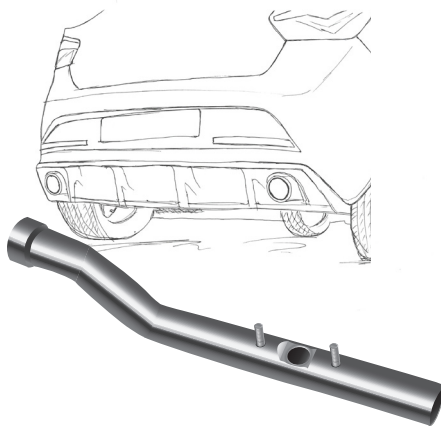
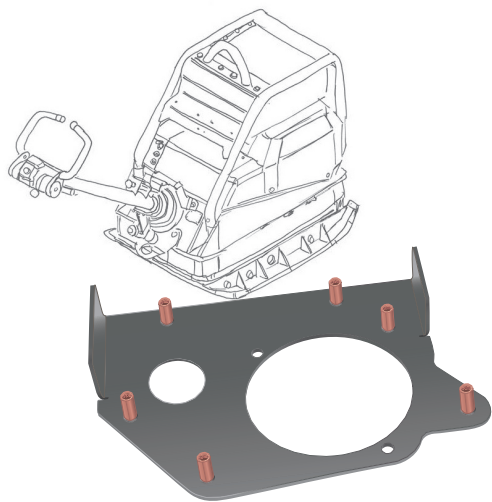


TECHNOLOGY
OF THE FUTURE

SRM®

MORE VARIETY, MORE APPLICATIONS

- ▶ Metal and glass construction
- ▶ Construction of electrical devices
- ▶ Container construction
- ▶ Mechanical engineering
- ▶ Steel construction
- ▶ Plant construction
- ▶ Apparatus construction
- ▶ Metalworking
- ▶ Motor vehicle construction
- ▶ Roofing





SRM[®]
YOUR ROAD TO
SUCCESS





■ **MADE**
■ **IN**
■ **GERMANY**

DO YOU REQUIRE ANY
FURTHER INFORMATION?
WE WILL BE PLEASED TO
ASSIST YOU:

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